

Appl. No. 10/773,371  
Reply to Office Action of April 25, 2005

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

**Claims 1 to 16 (Canceled)**

17. (Currently Amended) A method for preparing an ink-jet recording sheet, comprising the steps of:

(a) coating on, ~~[[the]]~~ a substrate, an aqueous coating composition containing a hydrophilic binder and inorganic particles to form ~~[[the]]~~ a porous layer;

(b) drying the porous layer over a period, wherein the period comprises at least a constant drying rate period and a falling drying rate period; and

(c) incorporating a solution containing an additive into the porous layer after the completion of the constant drying rate period in the same coating line used for coating the aqueous coating composition to form the porous layer.

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**18. (Currently Amended)** ~~[[The]]~~ A method for preparing ~~[[the]]~~  
an ink-jet recording sheet of claim 17, comprising the steps of:

(a) coating, on a substrate, an aqueous coating composition containing a hydrophilic binder and inorganic particles to form a porous layer;

(b) drying the porous layer over a period, wherein the period comprises at least a constant drying rate period and a falling drying rate period; and

(c) incorporating a wherein the incorporation of the solution containing an additive into the porous layer is carried out before a drying end point after the completion of the constant drying rate period and before the completion of the falling drying rate period.

**Claim 19 (Canceled).**

**20. (Currently Amended)** The method for preparing the ink-jet recording sheet of claim 17, wherein the incorporation of the solution containing an additive on the porous layer is carried out at the moment when the following formula is satisfied:

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$$V_{wp} + V_s \leq 1.5 V_{vp},$$

wherein  $V_{wp}$  is the volume content of water in the porous layer,  $V_s$  is the volume of the solution containing an additive and  $V_{vp}$  is the void volume of the porous layer at a drying end point.

21. (Original) The method for preparing the ink-jet recording sheet of claim 17, wherein the solution containing an additive comprises water or a mixture of water and an organic solvent which is miscible with water.

22. (Original) The method for preparing the ink-jet recording sheet of claim 17, wherein the ink-jet recording sheet is wound in a roll after the step (c) without substantially drying.

23. (Original) The method for preparing the ink-jet recording sheet of claim 17, wherein the substrate is a resin coated paper comprising paper covered with a polyolefin resin on both sides of the paper.

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**24. (Original)** The method for preparing the ink-jet recording sheet of claim 23, wherein the content of water in the paper is at most 8 weight % of the paper.

**25. (Currently Amended)** The method for preparing the ink-jet recording sheet of claim 23, wherein the incorporation of the solution containing an additive on the porous layer is carried out at the moment when the following formula is satisfied:

$$M_{wp} + M_{ws} \leq 0.07 M_p,$$

wherein  $M_{wp}$  is the weight content of water in the porous layer,  $M_{ws}$  is the weight content of water in the solution containing an additive, and  $M_p$  is the weight of the paper used for the substrate.

**26. (Original)** The method for preparing the ink-jet recording sheet of claim 17, wherein the additive in the solution is a surface active agent.

**27. (Original)** The method for preparing the ink-jet recording sheet of claim 17, wherein the viscosity of the solution containing an additive is at most 100 mPa·s.

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**28. (Original)** The method for preparing the ink-jet recording sheet of claim 17, wherein the additive of the solution is a hardener for the hydrophilic binder.

**29. (Original)** The method for preparing the ink-jet recording sheet of claim 17, wherein the additive in the solution is an image stabilizer.

**30. (Original)** The method for preparing the ink-jet recording sheet of claim 17, wherein the additive in the solution is a water-soluble polyvalent metal compound.

**31. (Original)** The method for preparing the ink-jet recording sheet of claim 17, wherein the pH value of the solution containing an additive is from 1 to 5.

**32. (Original)** The method for preparing the ink-jet recording sheet of claim 17, wherein the pH value of the solution containing an additive is from 8 to 13.